

Message

From: Ryan-Aylward, Michel ENV:EX [Michel.RyanAylward@gov.bc.ca]
Sent: 12/30/2019 3:54:00 PM
Subject: LKMRWG Face to Face Follow-up Info and Summaries
Attachments: Teck_Summary Table of Koocanusa Sampling Program 2019_Oct2019.pdf; MZ_Letter_of_Commitment_to_DEQ_10-10-2019.pdf; DEQ_McGrath_Response_Letter_of_Commitment_10-17-2019.pdf; Summary_2019-11-14_MRC_Meeting.pdf; 2019-EMC.PDF; SeTSC Face2Face 2019 Meeting Summary.pdf

Importance: High

Hello members and observers of the LKMRWG,

Thank you again for your participation at the recent face to face meetings in Montana. During the MRC meeting there were some requests for follow-up information. Please find the responses below and attached.

In addition, please also find attached:

- The summary of the MRC and SeTSC face-to-face meetings.
- The 2019 Environmental Monitoring Committee (EMC) report. For more info about the EMC and what it does see page 9 of the report.

Thanks!
Mich

B.C.-MT letters of commitment

Please find attached the letters that B.C. ENV and MT DEQ exchanged articulating their shared commitments to work on Lake Koocanusa.

Transboundary Monitoring Task Group (TMTG)

During Doug Hill's update about the TMTG he referred to a table that identified the TMTG's monitoring activities, it was requested that the table be shared. Please find it attached. (Titled *Teck Summary Table of Koocanusa Sampling Program...*)

Mine expansions:

Jeanien's overview of Elk Valley Status/Developments mentioned three mine expansions that were approved as part of the approval of the Area Based Management Plan/Elk Valley Water Quality Plan. There was a request for clarity around the scope of those expansions, they are as follows:

- EVO – BRE extension was a 16% increase in operating mine area.
- FRO – SWIFT extension was a 33% increase in mine permitted footprint.
- GHO – Cougar Pit expansion was a 2.5% increase in permitting mine area.

Compliance Matrix

Questions around BC's compliance approach led to a commitment to share a link to the compliance matrix. Please find it at the following web address:

<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/natural-resource-law-enforcement/environmental-compliance/how-compliance-is-assessed>

Implementation Plan Adjustment (IPA):

The IPA is now finalized and can be found on Teck's website as the following web address:

<https://www.teck.com/responsibility/sustainability-topics/water/water-quality-in-the-elk-valley/news-and-publications/>.

An IPA Summary was posted to Teck's website in February 2019; and the feedback received is summarized in the 2019 IPA.

To find the original Area Based Management Plan/Elk Valley Water Quality Plan please use the link below. Annex D.1 and D.2 include information about the modelling for the ABMP.

- <https://www2.gov.bc.ca/gov/content/environment/waste-management/industrial-waste/mining-smelting/teck-area-based-management-plan>

Monitoring on Kootenay lake

There was a question about whether there is any monitoring conducted by BC on Kootenay Lake. Kootenay Lake activities are led by the Ministry of Forests, Lands and Natural Resource Operations and Rural Development, they provided us with a link a recent report on the Kootenay Lake Nutrient Restoration Program North Arm and South Arm, please find it at the following web address: http://a100.gov.bc.ca/appsdata/acat/documents/r54875/Kootenay_2016-FINAL-withRD_1547574424559_7572130131.pdf

Teck's Operations

Over the course of the day there were three questions around Teck's operations that required follow-up, including:

- How much water is treated; what percentage is treated vs. untreated?
- Are there any PH changes from/in saturated rock fill?
- What proportion are new vs. legacy spoils?

The information about treated water and proportion of legacy vs. new spoils can be found in Appendices H and E of the IPA respectively (accessible at the following web address: <https://www.teck.com/responsibility/sustainability-topics/water/water-quality-in-the-elk-valley/news-and-publications/>). Teck has requested additional clarity around the question on PH changes – however we failed to note who specifically asked this question. You are invited to contact Meera Bawa directly for the PH information and for any other additional questions, using the following email address: Meera.Bawa@teck.com.

Selenium exceedances

The Ministry of Environment and Climate Change Strategy compliance and enforcement actions are guided by the ministry's Compliance and Enforcement Policy and Procedures: https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/reporting/documents/environmental-enforcement-docs/ce_policy_and_procedure_2018.pdf. A number of compliance tools are available to obtain compliance and to promote general deterrence of non-compliance. One of those tools are Administrative Monetary Penalties (AMPs). AMPs are discretionary financial penalties that can be administered with less onerous procedural and legal requirements than a court prosecution, making them an effective and efficient enforcement option. When a compliance inspection is referred to AMP, a package is sent to an independent statutory decision maker for consideration and after an administrative fairness process is followed a final decision is made. This process can take anywhere from a month to years to complete depending on the specific situation and complexity of the circumstances at hand.

Current Administrative Penalty Referrals in process:

- Daphnia Magna Test Failures:
 - Between December 30, 2014 – January 9, 2018 Teck reported 31 Daphnia Magna toxicity test failures from various discharge locations in the Upper Fording River and Line Creek area. As a result, 2 advisories, 10 warnings were issued. On November 5, 2018 a notice of AMP referral was sent to Teck in an inspection record for failed daphnia toxicity tests on June 4, July 5, 2018 and May 3, 2019. The AMP package has been submitted to the Statutory Decision Maker for review.
- FRO Compliance Point Nitrate and Sulphate Exceedances:
 - Between February 2015- September 2018 Teck reported 9 monthly average sulphate exceedances resulting in 2 advisories, 5 warnings issued. On April 2, 2019 a notice of AMP referral was sent to Teck in an inspection record for additional monthly sulphate exceedances. The AMP package has been prepared for a total of 6 monthly average sulphate exceedances between October 2018 to March 2019 and is currently with the statutory decision maker.

- Fording River South AWTF Failure to meet permitted operational timelines:
 - On May 23, 2019, a notice for an AMP referral was issued to Teck in an inspection record for failing to construct and operate the FRO south AWTF by December 31, 2018. The AMP referral is currently in process.

In British Columbia Investigations are lead by the Conservation Officer Service. Investigations involve a systematic process of collecting evidence and information relevant to a suspected non-compliance for the purposes of enforcement and may include activities such as obtaining and executing search warrants, taking statements, gathering physical evidence as well as preparing briefs for Crown Counsel or a referral package for an AMP.

Current Investigation:

An investigation referral was sent to the COS on May 8, 2018 related to monthly average and maximum Selenium exceedances located in the Elk Valley at FRO compliance point, LCO compliance point, and Koocanusa Reservoir Order Station.

FRO Compliance Point Selenium Exceedances

- Advisory issued Sept.2015
- Multiple warnings issued between April 6, 2016 and February 18, 2018
- Referred for Investigation with the COS for Selenium monthly average exceedances from January 2018 to present. 11 monthly average exceedances and 18 daily maximum exceedances.

LCO Compliance Point Selenium Exceedances

- Advisory issued Sept.2015
- Multiple warnings issued between April 6, 2016 and February 18, 2018
- Referred to Investigation for Selenium monthly average exceedances from January 2018 to April 2018. 4 monthly average exceedances and 16 daily maximum exceedances.

Koocanusa Reservoir Selenium Exceedance

- The April 2018 monthly average selenium concentration exceeded the permit limit of 2 ug/l at the Koocanusa reservoir order station E300230, resulting in an average of 2.7ug/l. This exceedance was referred to the COS for investigation. There was no previous selenium exceedance at this location prior to April 2018 reported to the Ministry.

All inspection records are publicly available on the Natural Resource Compliance & Enforcement Database <https://www2.gov.bc.ca/gov/content/environment/research-monitoring-reporting/reporting/environmental-enforcement-reporting/how-to-search-the-database-evd>

Recent Administrative Penalties Issued by the Ministry can be found at:

<https://www2.gov.bc.ca/gov/content/environment/research-monitoring-reporting/reporting/env-compliance-inspection-report>